



Maryland Summer Centers

for Gifted and
Talented Students

Sponsored by the Maryland State Department of Education

2012 Maryland Summer Centers for Gifted and Talented Students Summary Sheet

Spanish translation is available. Call 410-767-0821.

Continuing a tradition of excellence for forty-five years, the Maryland Summer Centers (MSC) engage gifted and talented students entering Grades 4-12 in unique summer programs. Centers located across the State offer one- to three-week residential and nonresidential programs with a focus on the arts, sciences, technology, engineering, and world languages.

Please consult the Maryland State Department of Education website www.marylandpublicschools.org/summercenters for more detailed descriptions of the Centers and application forms.

The deadline for applications is April 15. Directors will accept applications after April 15 until the Center enrollment is filled.

Honeywell Center for Ecosystems Education at Horn Point

Funded by Honeywell Hometown
Solutions

LOCATION: University of Maryland
Center for Environmental Science,
Cambridge
Dorchester County
ENTERING GRADES: 6 - 10
DATES: See below.
TUITION: \$385 one-week residential

Work beside scientists at one of the
premier research facilities in the
world, the Horn Point Environmental
Laboratory on the Choptank River.
Using the Investigating and
Evaluating Environmental Issues and
Actions model, students will collect
and analyze real-world data to
determine the effects of physical,
chemical, biological, and human
influences on submerged aquatic
vegetation, the rockfish, the blue crab,
and the oyster in the Chesapeake Bay.
Section A: Entering Grades 6-8
July 14-20
Section B: Entering Grades 7-10
July 22-28

Contact: Gwendolyn B. Handy
Dorchester County Public Schools
700 Glasgow Street
Cambridge, MD 21613
(410) 228-4747 Ext 1011
handyg@dcpsmd.org

Center for Space Science Funded by Science Applications International Corporation (SAIC)

LOCATION: Johns Hopkins University
Applied Physics Laboratory, Howard
County
ENTERING GRADES: 6-7
DATES: July 16 - 27
8:30 AM – 3:00 PM
TUITION: \$350 two-week nonresidential

Learn about the current applications of
space technology and exploration of the
solar system by simulating the process
involved in designing a NASA Discovery
Mission. Plan and launch a simulated
space mission, including the design and
fabrication of instrumentation for a
spacecraft. Interact with scientists and
engineers, tour Mission Control, and the
environmental test facilities located at the
Johns Hopkins University Applied Physics
Laboratory.

Contact: Lindsey Jones
Baltimore County Public Schools
1100 Mace Ave
Baltimore, MD, 21221
(410) 887-0190
ljones15@bcps.org

Maryland Summer Center for Conservation Research Funded by Harford County Public Schools

LOCATION: Harford Glen Environmental
Center
Harford County
ENTERING GRADES: 4-8
DATES: July 16 - 27
8:00 AM – 3:00 PM
TUITION: \$250 two-week nonresidential

Harford Glen is the home to large areas of
wetlands containing numerous rare plants
and many forms of wildlife that use the
wooded areas and water as a refuge. Due
to the ever-increasing number of people
looking for outdoor experiences, these
ecological resources are being impacted.
At the Center for Conservation Research,
you will research topics such as aquatic
biology, wildlife management, forestry,
and soil conservation. You will use
Geospatial technologies such as GIS and
GPS to collect and analyze data. The
output of this research will be an action
plan and presentation.

Contact: Debra Daugherty
Harford County Public Schools
102 South Hickory Avenue
Bel Air, MD 21014
(410) 588-5354
debra.daugherty@hcps.org
www.hcps.org/gifted

Center for Global Languages

LOCATION: Meade Middle School,
Anne Arundel County
ENTERING GRADES: 4 - 6
DATES: July 9 - 19
TUITION: \$250 two-week nonresidential

This Center is designed to offer you an introduction to the language and the culture of the Chinese and Arabic people. Choose Chinese whose civilization is far more ancient than ours. Greet friends and talk about your family in Chinese, plan a trip to Beijing and participate in many of the same activities that Chinese students do in China. Or, you might enjoy the excitement and beauty of the Arabic language and culture as it comes alive with hands-on experiences. This center offers a rigorous, engaging, and exciting cultural experience aimed at expanding students' knowledge and understanding of language and diverse people.

Contact: Jennifer Hernandez
World and Classical Languages
Anne Arundel County Public
Schools
2644 Riva Road
Annapolis, MD 21401
(410) 222-5424
jhernandez3@aacps.org

Center for Law and Government

LOCATION: University of Maryland
School of Law
Baltimore City
ENTERING GRADES: 10 - 12
DATES: July 9 - 19
TUITION: \$300 two-week
nonresidential (Monday through
Thursday only)

Meet and work with attorneys, judges, law clerks, law enforcement officers and law-makers as you participate in simulations of civil, criminal, and appellate court cases in a law school environment. You will decide whether the government exceeded its rights in tracking a suspected drug dealer. You will weigh all aspects of the case, consider its path through the courts system, and determine pros and cons of the Supreme Court decision.

Contact: Shelley Brown
Maryland Bar Center, 4th Floor
520 W. Fayette Street
Baltimore, MD 21201
(410) 706-5360
sbw@clrep.org
www.clrep.org

Center for Computer Programming: Animation and Robotics

LOCATION: Aberdeen High School,
Harford County
ENTERING GRADES: 4 - 10
DATES: Session 1 (Gr. 4 - 7) July 11- 22
Session 2 (Gr. 8-10) July 25-Aug 5
9:00 AM - 3:00 PM
TUITION: \$250 two-week nonresidential

Have you ever wanted to design your own animated computer game? Is computer programming something that you think about doing in your future? Are you interested in the world of gaming, graphic arts, information assurance, or cyber security? You will have an opportunity to work in teams as well as independently to produce a computer animated story. As you practice manipulating your story objects, you will learn how to create programming codes and will develop story boards and finally your own animated story will evolve that will be shared with STEM professionals. In addition, you will learn a different type of programming as you build and program a robot to complete a series of maneuvers. As part of an engineering team, you will collaborate on the most effective codes to use to make your robot successfully complete its tasks. You will also learn about the careers open to those with computer programming skills in the areas of higher education, high tech industries, the sciences, military, and national security.

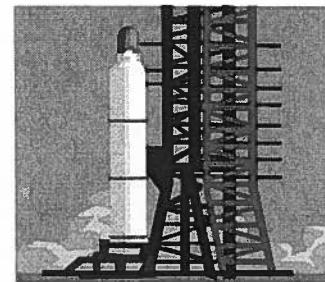
Contact: Debra Daugherty
Harford County Public Schools
102 South Hickory Avenue
Bel Air, MD 21014
(410) 588-5354
debra.daugherty@hcps.org
www.hcps.org/gifted

How to Apply

Obtain application information from the website www.marylandpublicschools.org/summercenters, the Center Contact, or Stephanie Zenker
Maryland State Department of Education
200 W. Baltimore Street 5th floor
Baltimore, MD 21201
410-767-0821
szenger@msde.state.md.us

All programs use a selection process based on multiple criteria. Programs in the arts require a portfolio and/or audition. Please note earlier dates for auditions in the arts programs.

**All Maryland Summer Centers
programs offer financial assistance.**



Center for Future Engineers: Robot Design

Funded by Northrop Grumman and
the Maryland Space Business
Roundtable

LOCATION: Frostburg State
University
Allegany County
ENTERING GRADES: 9 - 12
DATES: June 23 - 28
TUITION: \$475 6-day residential

Look into the future as you design and program your very own robot to traverse a simulated moon surface. You will assess the terrain and then use your newly acquired engineering knowledge, creativity, and passion to program your robot to accomplish certain goals. While working with engineers in high tech, state-of-the-art labs and you will also explore career paths in the exciting field of engineering. In addition, you will have the opportunity to experience living on a college campus.

Contact: Dr. M. Eltayeb
Center for Future Engineers: Robotic
Design
Frostburg State University
Department of Physics and
Engineering
123 Compton Science Center
Frostburg, MD 21532
(301) 687-4298
Fax (301) 687-7966
mseltayeb@frostburg.edu
www.msc-robotics.net



Center for Computer Science and Creativity

Funded by Northrop Grumman

LOCATION: Community College of Baltimore County – Essex Campus
ENTERING GRADES: 3 - 8

DATES: July 16 - 27
9:00 AM – 3:00 PM

TUITION: \$200 two-week nonresidential

Learn a new way to be creative through computer programming. Using the medium of computer languages, participants will become the architects of their own virtual worlds. Students will create animations using visual objects and straightforward commands that make programming easier to understand.

Students will exercise their creativity, problem-solving, and critical thinking skills while designing a final project to present at the conclusion of the session. The skills they develop provide a useful foundation for learning more advanced programming in languages such as Java, C++, and Python. Students will also learn valuable processes essential to programming. This includes everything from the software development cycle to “CamelCase”. The program also emphasizes critical executive function skills such as project management, collaboration, and communication.

Housed at the Community College of Baltimore County Essex Campus, students will get the college experience in state of the art computer labs. Lastly, the two-week experience will emphasize Internet safety and highlight the exciting careers in Computer Science and Cyber-security.

Contact: Eric Cromwell
Baltimore County Public Schools
9611 Pulaski Highway, Suite 307
Baltimore, MD 21220
(410) 887-2063
Ecromwell@bcps.org



Center for the Fine and Performing Arts

LOCATION: Salisbury University,
Wicomico County

ENTERING GRADES: 7 - 12

DATES: July 1 - 14

TUITION: \$1,200 two-week residential

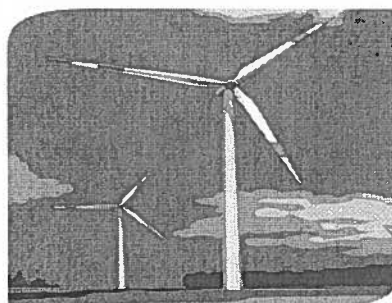
Financial assistance is available.

Come to the beautiful campus of Salisbury University and gain a sense of living in an artists' community. Enhance your unique abilities and learning style as you participate in one of the following course offerings: orchestra, musical theater, acting, visual arts, creative writing, or digital filmmaking.

Contact: Robert Smith
Salisbury University
1101 Camden Avenue
Salisbury, MD 21801-6860
(410) 548-4777
msca@salisbury.edu
www.salisbury.edu/msca

Applications must be postmarked by
April 11 in order to attend an audition.

April 14: Franklin Middle School, Baltimore County or
April 21: Salisbury University



Center for Space Engineering: Robotics

LOCATION: Howard B. Owens Science Center, Prince Georges County

ENTERING GRADES: 7 - 9

DATES: July 9 - 24 (Monday – Thursday only)
8:30 AM – 3:00 PM

TUITION: \$400 two-week nonresidential

Students will design, build, and test robots that use sensors to conduct missions. In small engineering teams, you will explore the process of brainstorming, collaborating, and implementing various levels of robotic challenges in order to search for simulated lunar ice. You will also have access to the Challenger Learning Center, NASA's Goddard Space Flight Center's Science on a Sphere, and the Planetarium. Finally, you will interact with an astronaut, engineers, and other science-related professionals while you learn about cutting edge STEM careers. A space engineering field trip will also be included.

Contact: Treesa Elam-Respass
Howard B. Owens Science Center
9601 Greenbelt Road
Lanham, MD 20706
(301) 918-8750
Treesa.ElamRespass@pgcps.org

Center for the Physics of Solar and Wind Power

Funded by Northrop Grumman

LOCATION: Frostburg State University,
Allegany County

ENTERING GRADES: 7 - 9

DATES: July 15 – 21

TUITION: \$400 one-week residential

Do you love science and mathematics? Work with college professors to learn the principles of electricity, power, and energy to set up a model house with a windmill and solar panels to study how these basic principles apply to the residential use of renewable energy. You'll compare your predictions with actual data from a solar and wind equipped house on the Frostburg University campus. After careful data collection on efficiency and cost analysis, you will prepare arguments in favor of or opposing the use of solar and wind power as a source of energy for typical houses. You will visit a wind turbine site to see these energy workhorses up close.

Contact: Dr. Hang Deng-Luzader
Department of Physics/Engineering
Frostburg State University
104 Compton Science Center
Frostburg, MD 21432
(301) 687-4385
hluzader@frostburg.edu



**Center for Urban Sustainability
at the Maryland Science Center**
Funded by Northrop Grumman

LOCATION: Maryland Science Center, Baltimore City
ENTERING GRADES: 7 - 9
DATES: June 25 - July 15
TUITION: \$450 three-week nonresidential

Students will have the opportunity to explore one of three strands of urban sustainability: urban agriculture, energy, and water. You might choose urban agriculture where you will investigate the real possibility of growing food in and around Baltimore. You will plan design, and build a sustainable wall garden on the site of the Science Center transforming the building into a beautiful oasis in the City. Or, you might choose the energy strand where you will explore the environmental and economic impacts of solar, wind, and steam energy as well as alternative fuel sources such as geothermal, hydroelectric, and nuclear energy. What is the feasibility of using these energy sources at the Science Center and throughout the City? And, finally, you might choose the water strand where you will study the causes and effects of pollution in the Inner Harbor and be a part of the Mayor's Clean Harbor Initiative. A field trip will be included for each strand.

Contact: Matt Budinger
Perry Hall High School
4601 Ebenezer Road
Baltimore, MD 21236
(410) 887-5108
mbudinger@bcps.org

**Center for Chesapeake Bay
Watershed Investigations at the
National Aquarium**

LOCATION: National Aquarium, Baltimore City and the University of Maryland Center for Environmental Science at Horn Point, Dorchester County
ENTERING GRADES: 7 - 9
DATES: July 23 - 27 non-residential and July 30 - August 3 residential
TUITION: \$400 includes one-week nonresidential + one week residential

Work alongside scientists at the National Aquarium and the U. of M. Center for Environmental Science. Week one will be at the National Aquarium where you will use the Aquarium's fish collection as a study tool, identify local plants and animals, and create a biodiversity study. During field visits to a freshwater and brackish water site you will travel by kayak to collect field data on water quality and biodiversity.

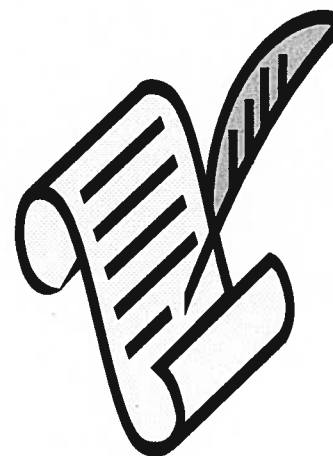
For week two, you will be transported to the U. of M. Center for Environmental Science where you will live in dorms. Working with the scientists at the Horn Point Lab, you will learn about and assist scientists with current research efforts on key Chesapeake Bay species. You will conduct scientific studies on water quality and biodiversity in different areas of the Chesapeake Bay watershed to determine human impacts and possible solutions.

Students must be able to attend both weeks.

Contact: Maria Madero
National Aquarium
501 East Pratt Street
Baltimore, MD 21202
(410) 576-3875
mmadero@aquaria.org

The Maryland State Department of Education does not discriminate on the basis of race, color, sex, age, national origin, religion, disability, or sexual orientation in matters affecting employment or in providing access to programs. For inquiries related to Department policy, contact
Equity Assurance and Compliance Branch.

410-767-0433 - voice
410-767-0431 - fax
410-333-6442 - TTY/TDD



**Dixon Center for Creative Writing
and Film Production at Washington
College**
Funded by Dixon Valve & Coupling Company

LOCATION: Washington College, Kent County
ENTERING GRADES: 7 - 9
DATES: July 9 - 20
TUITION: \$200 two-week nonresidential

Become an author, playwright, or poet as you spend Week 1 at the Dixon Center for Creative Writing and Film Production reading works of famous authors and then becoming a famous author yourself. Learn the power of the written word - to amuse, to inform, to persuade - as you hone your craft on state-of-the-art computers. Be inspired by Washington College creative writing professors and authors as they share their expertise with you.

During Week II at the Dixon Center for Creative Writing and Film Production, you will turn your written words into a short film created and produced by you! Learn how to turn your creative writing into a story board. Then, learn the mechanics of videography as you shoot and edit your film. Finally, present your creative writing masterpieces and your film to an audience of your parents/guardians, college professors, and business professionals at the Celebration on the final day of the Center.

Contact: Mary Price
Dixon Valve and Coupling Company
800 High Street
Chestertown, MD 21620
(410) 778-7624
mprice@dixonvalve.com